

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1-66. (Cancelled)

67. (Currently Amended) A method of testing a host for a cancer ~~condition~~, the method comprising testing a sample obtained from the host for an autoimmune response against a plurality of transcription ~~modulating~~ factors, wherein the detection of an autoimmune response against said transcription factors is indicative that the host has a cancer condition and further indicates a type of the cancer condition.

68. (Previously Presented) The method of Claim 67, wherein the sample is a tissue or a bodily fluid.

69. (Previously Presented) The method of Claim 67, wherein the sample is a bodily fluid chosen from the group consisting of blood, tears, semen, saliva, serum, and urine.

70. (Currently Amended) The method of Claim 69, wherein testing the sample for the autoimmune response comprises using the sample for an autoantibody against the plurality of transcription ~~modulating~~ factors.

71. (Currently Amended) The method of Claim 67, wherein the at least one transcription ~~modulating~~ factors are immobilized for the testing the sample.

72. (Previously Presented) The method of Claim 71, wherein the testing the sample comprises a dot blot, a slot blot, or an enzyme-linked immunoabsorbent assay.

73. (Currently Amended) The method of Claim 67, wherein the cancer ~~condition~~ is a presence of a cancer cell in the host.

74. (Withdrawn) The method of Claim 73, wherein the cancer cell is an astrocytoma, neuroblastoma or glioblastoma.

75. (Currently Amended) The method of Claim [[73]] 74, wherein the cancer cell is a lung cancer cell, small cell lung cancer cell, a non small cell lung cancer cell, or a prostate cancer cell.

76. (Previously Presented) The method of Claim 67, wherein the sample comprises an NK cell, a T cell, a lymphocyte, or a macrophage

77. (Currently Amended) The method of Claim 67, wherein testing the sample for the autoimmune response comprises detecting antibodies against the plurality of transcription ~~modulating~~ factors in the sample.

78. (Currently Amended) The method of Claim 77, wherein detecting antibodies against the plurality of transcription ~~modulating~~ factors in the sample comprises using the plurality of transcription ~~modulating~~ factors to detect the antibodies.

79. (Currently Amended) The method of Claim 77, wherein detecting antibodies against the plurality of transcription ~~modulating~~ factors in the sample comprises using an array of peptides against which the presence of the antibodies is detected.

80. (Currently Amended) The method of Claim 77, wherein at least four antibodies against the transcription ~~modulating~~ factors are detected.

81. (Previously Presented) The method of Claim 67, wherein the host is a human.

82. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors perturbs chromatin structure to permit access of transcriptional components to a gene.

83. (Withdrawn) The method of Claim 82, wherein the at least one transcription modulating factors that perturb chromatin structure to permit access of transcriptional components to a gene are chosen from the group consisting of NURF, CHRAC, ACF, SWI/SNF complex, and SWI/SNF-related (RUSH) proteins.

84. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is involved in the recruitment of a TATA-binding protein (TBP)-containing or not-containing (Initiator) complexes.

85. (Withdrawn) The method of Claim 82, wherein the at least one transcription modulating factors that is involved in the recruitment of a TATA-binding protein (TBP)-containing or not-containing (Initiator) complexes are chosen from the group consisting of TFIIB, TFIID, TFIIE, TFIIIF, and TFIIII, TRP, and TRF2.

86. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is a TATA-binding protein.

87. (Withdrawn) The method of Claim 67, wherein the TATA binding protein is chosen from the group consisting of a TAFIIA complex, TAFIIAa, TAFIIAb, TAFIIAg, a TAFIIB complex, TAFIIB, RAP74, RAP30, a TAFs forming the TFIID complex, TAFII250, CIF150, TAFII130/135, TAFII100, TAFII70/80, TAFII31/32, TAFII20, TAFII15, TAFII28, TAFII68, TAFII55, TAFII30, TAFII18, TAFII105, a TAFIIE complex, TAFIIIEa, TAFIIIEb, a

TAFIIF complex, p62, p52, MAT1, p34, XPD/ERCC2, p44, XPB/ERCC3, Cdk7, CyclinH, a RNA polymerase II complex, hRPB1, hRPB2, hRPB3, hRPB4, hRPB5, hRPB6, hRPB7, hRPB8, hRPB9, hRPB10, hRPB11, and hRPB12.

88. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors forms a coactivator complex with TRAP, DRIP, ARC, CRSP, Med, SMCC, or NAT.

89. (Withdrawn) The method of Claim 88, wherein the at least one of the transcription modulating factors forms a coactivator complex with TRAP, DRIP, ARC, CRSP, Med, SMCC, or NAT is chosen from the group consisting of TRAP240/DRIP250, TRAP230/DRIP240, DRIP205/CRSP200/TRIP2/PBP- /RB18A/TRAP220, hRGR1/CRSP150/DRIP150/TRAP170, TRAP150, CRSP130/hSur-2/DRIP130, TIG-1,; CRSP100/TRAP100/DRIP100, DRIP97, DRIP92/TRAP95, CRSP85, CRSP77/DRIP77/TRAP80, CRSP70/DRIP70, Ring3, hSRB10/hCDK8, DRIP36/hMEDp34, CRSP34, CRSP33/hmE7, hMED6, hSRB11/hCyclin C, hSOH1, and hSRB7.

90. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is a protein of the androgen receptor complex.

91. (Withdrawn) The method of Claim 90, wherein the protein of the androgen receptor complex is a member of the group consisting of ANPK, ARIP3, PIAS family, PIASalpha, PIASbeta, PIASgamma, ARIP4.

92. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is a transcriptional co-repressor.

93. (Withdrawn) The method of Claim 92, wherein the transcriptional co-repressor is chosen from the group consisting of N-CoR family, SMRT family, NCOR2/SMRT/TRAC1/CTG26/TNRC14/SMRTE, REA, MSin3, HDAC family, and HDAC5.

94. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of bHLH, suUSF, AP4, E-protein, E2A/E12, E47, HEB/ME1, HEB2/ME2/MITF-2A,B,C/SEF-2/TFE/TF4/R8f, TFE family, TFE3, TFEB, Myc family, Max family, Mad families, and WBSCR14.

95. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of neurogenins, Neurogenin-1/MATH4c, Neurogenin-2/MATH4a, Neurogenin-3/MATH4b, NeuroD, NeuroD-1, NeuroD-2, NeuroD-3(6)/my051/NEX1/MATH2/Dlx-3, NeuroD-4/ATH-3/NeuroM), ATH, ATH-1/MATH1, ATH-5/MATH5, ASH, ASH-1/MASH1, ASH-2/LASH2, ASCL-3/reserved, NSCL, NSCL1/HEN1,

NSCL2/HEN2, HAND, Hand1/eHAND/Thing-1, Hand2/dHAND/Thing-2, Mesencephalon-Olfactory Neuronal bHLHs, COE proteins, COE1, COE2/Olf-1/EBF-LIKE3, COE3/Olf-1, and Homol/Mmot1.

96. (Currently Amended) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of glia enriched bHLHs, OLIG proteins, Olig1, Olig2/protein kinase C-binding protein RACK17, Olig3, bHLH family of negative regulators, Ids, Id1, Id2, Id3, Id4, DIP1, HES, HES1, HES2, HES3, HES4, HES5, HES6, HES7, SHARP, SHARP1/DEC-2/eip1/Stra13, SHARP2/DEC-1/TR00067497_p, Hey/HRT proteins, Hey1/HRT1/HERP-2/HESR-2, Hey2/HRT2/HERP-1, HRT3, Lyl family, Lyl-1, Lyl-2, RGS family, RGS1, RGSRGS2/G0S8, RGS3/RGP3, capsulin, CENP-B, Mist1; Nhlh1, MOP3, Scleraxis, TCF15, bA305P22.3, and Ip1f-1/Pdx-1/Id1x-1/Stf-1/Iuf-1/Gsf.

97. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of beta.-catenin, GSK3, Groucho proteins, Groucho-1, Groucho-2, Groucho-3, Groucho-3, TCF family, TCF1A, B, C, D, E, F, G/LEF-1, TCF3, and TCF4, PC4, and MBF1.

98. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of Delta family, Serrate family, Jagged family, Dll1, Dll3, Dll4, Jagged1, Jagged2, Serrate2, Notch family, Notch1, Notch2, Notch3,

Notch4, TAN-1, Bearded family, E(spl)m.alpha., E(spl)m2, E(spl)m4, E(spl)m6, Fringe family, Mfng, Rfng, Lfng, Deltex/dx-1, MAML1, RBP-Jk/CBF1/Su(H)/KBF2, and RUNX.

99. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of Chordin, Noggin, Follistatin, SMAD proteins, SMAD1, SMAD2, SMAD3, SMAD4, SMAD5, SMAD6, SMAD7, SMAD8, SMAD9, SMAD10, SHH, IHH, Su(fu), GLI family, GLI/GLI1, Gli2, Gli3, Zic family, Zic/Zic1, Zic2, and Zic3).

100. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of a Wing helix/forkhead family of transcription factors, BF proteins, BF1, BF-2/Freac4, Fkh5/Foxb1/HFH-e5.1/Mf3, and Fkh6/Freac7.

101. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of HMG transcription factors, Sox proteins, Sox1, Sox2, Sox3, Sox4, Sox6, Sox10, Sox11, Sox13, Sox14 Sox18, Sox21, Sox22, Sox30, HMGIX, HMGIC, HMGIY, and HMG-17.

102. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of Hox proteins, Evx family, Evx1, Evx2, Mox family, Mox1, Mox2, NKL family, NK1, NK3, Nkx3.1, NK4, Lbx family, Lbx1, Lbx2, Tlx

family, Tlx1, Tlx2, Tlx3, Emx/Ems family, Emx1, Emx2, Vax family, Vax1, Vax2, Hmx family, Hmx1, Hmx2, Hmx3, NK6 family, Nkx6.1, Msx/Msh family, Msx-1, Msx-2, Cdx, Cdx1, Cdx2, Xlox family, Lox3, Gsx family, Goosecoid, GSX, GSCL, En family, En-1, En-2, HB9 family, Hb9/HLXB9, Gbx family, Gbx1, Gbx2, Dbx family, Dbx-1, Dbx-2, Dll family, Dlx-1, Dlx-2, Dlx-4, Dlx-5, Dlx-7, Iroquois family, Xiro1, Irx2, Irx3, Irx4, Irx5, Irx6, Nkx, Nkx2.1/TTF-1, Nkx2.2/TTF-2, Nkx2.8, Nkx2.9, Nkx5.1, Nkx5.2, PBC family, Pbx1a, Pbx1b, Pbx2, Pbx3, Prd family, Otx-1, Otx-2, Phox2a, Phox2B, Ptx family, Pitx2, Pitx3/Ptx3, XANF family, Hesx1/XANF-1, BarH family, BarH, Brx2, Cut, and Gtx.

103. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of POU domain factor proteins, Brn2/XIPou2, Brn3a, Brn3b, Brn4/POU3F4, and Brn5/Pou6F1.

104. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of transcription factors with a homeodomain region plus a LIM region, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, LMO family, LMO1, LMO2, and LMO4.

105. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of Paired box transcription factors, Pax2, Pax3, Pax5, Pax6, Pax7, and Pax8.

106. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of GATA family, Gata1, Gata2, Gata3, Gata4/5, Gata6, MyT family, MyT1, MyT11, MyT2, MyT3, SAL family HSal1, Sal2, Sall3, REST/NRSF/XBR, Snail family, Scratch/Scrt, Zf289, FLJ22251, MOZ, ZFP-38/RU49, Pzf, Mtsh1/teashirt, MTG8/CBF1A-homolog, TIS11D/BRF2/ERF2, TTF-I interacting peptide 21, Znf-HX, Zhx1, KOX1/NGO-St-66, ZFP-15/ZN-15, ZnF20, ZFP200, ZNF/282, HUB1, Finb/RREB1, Nuclear Receptors, liganded, ER family, TR family, RAR family, RXR family, PML-RAR family, PML-RXR family, Not1/Nurr, ROR, COUP-TF family, COUP-TF1, and COUP-TF2.

107. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of RING finger transcription factor proteins, KIAA0708, Bfp/ZNF179, BRAP2, KIAA0675, LUN, NSPc1, Neuralized family, neu/Neur-1, Neur-2, Neur-3, Neur-4, RING1A, SSA1/RO52, ZNF173, PIAS family, PIAS-alpha, PIAS-beta, PIAS-gamma, parkin family, and ZNF127 family.

108. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of proteins relating to cell-cycle progression-dedicated components that are part of the RNA polymerase II transcription complex, E2F family, E2F-1, E2F-3, E2F-4, E2F-5, DP family, DP-1, DP-2, p53 family, p53, p63, p73, mdm2; ATM, RB family, RB, p107, and p130.

109. (Withdrawn) The method of Claim 67, wherein at least one of the transcription modulating factors is chosen from the group consisting of factors involved in splicing.

110. (Withdrawn) The method of Claim 67, wherein at least one of the factors involved in splicing is chosen from the group consisting of Hu family, HuA, HuB, HuC, HuD, Musashi1, Nova family, Nova1, Nova2, SR proteins, B1C8, B4A11, ASF SRp20, SRp30, SRp40, SRp55, SRp75, SRm160, SRm300, CC1.3/CC1.4, Def-3/RBM6, SIAHBP/PUF60, Sip1, C1QBP/GC1Q-R/HABP1/P32, Staufen, TRIP, Zfr, CPSF, and Inducible poly(A)-Binding Protein (U33818).

111. (Withdrawn) A diagnostic device comprising a plurality of reagents that each interact with a chemically distinct antibody against a transcription modulation factor in a sample from a host to produce an independently detectable signal that indicates a presence of the chemically distinct antibody.

112. (Withdrawn) The diagnostic device of Claim 111, comprising at least about ten of the reagents.

113. (Withdrawn) The diagnostic device of Claim 111, comprising at least about twenty of the reagents.

114. (Withdrawn) The diagnostic device of Claim 111, comprising at least about fifty of the reagents.

115. (Withdrawn) The diagnostic device of Claim 111, comprising at least about one hundred of the reagents.

116. (Withdrawn) The diagnostic device of Claim 111, having between about ten and about fifty of the reagents.

117. (Withdrawn) The diagnostic device of Claim 111, wherein the sample is a tissue or a bodily fluid.

118. (Withdrawn) The diagnostic device of Claim 111, wherein the sample is a bodily fluid chosen from the group consisting of blood, tears, semen, saliva, serum, and urine.

119. (Withdrawn) The diagnostic device of Claim 111, wherein the reagents are immobilized for the testing the sample.

120. (Withdrawn) The diagnostic device of Claim 111, comprising the reagents disposed for use in a dot blot, a slot blot, or an enzyme-linked immunoabsorbent assay.

121. (Withdrawn) The diagnostic device of Claim 111, comprising the reagents disposed in a microarray.

122. (Withdrawn) The method of Claim 111, wherein the signal comprises radioactivity, fluorescence, or enzyme activity.

123. (Withdrawn) The diagnostic device of Claim 111, wherein the transcription modulation factors are predictive for astrocytoma, neuroblastoma or glioblastoma.

124. (Withdrawn) The diagnostic device of Claim 111, wherein the transcription modulation factors are predictive for lung cancer, small cell lung cancer, a non small cell lung cancer, or prostate cancer.

125. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factor is a member of the group consisting of NURF, CHRAC, ACF, SWI/SNF complex, SWI/SNF-related (RUSH) proteins, TFIIB, TFIID, TFIIE, TFIIF, and TFIIH, TRP, TRF2, a TATA-binding protein, a TAFIIA complex, TAFIIAa, TAFIIAb, TAFIIAg, a TAFIIB complex, TAFIIB, RAP74, RAP30, a TAFs forming the TFIID complex, TAFII250, CTF150, TAFII130/135, TAFII100, TAFII70/80, TAFII31/32, TAFII20, TAFII15, TAFII28, TAFII68, TAFII55, TAFII30, TAFII18, TAFII105, a TAFIIE complex, TAFIIEa, TAFIIEb, a TAFIIF complex, p62, p52, MAT1, p34, XPD/ERCC2, p44, XPB/ERCC3, Cdk7, CyclinH, a RNA polymerase II complex, hRPB1, hRPB2, hRPB3, hRPB4, hRPB5, hRPB6, hRPB7, hRPB8, hRPB9, hRPB10, hRPB11, and hRPB12.

126. (Withdrawn) The diagnostic device of Claim 111, wherein at least one of the transcription modulating factors forms a coactivator complex with TRAP, DRIP, ARC, CRSP, Med, SMCC, or NAT.

127. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factor is a member of the group consisting of TRAP, DRIP, ARC, CRSP, Med, SMCC, or NAT is chosen from the group consisting of TRAP240/DRIP250, TRAP230/DRIP240, DRIP205/CRSP200/TRIP2/PBP-/RB18A/TRAP220, hRGR1/CRSP150/DRIP150/TRAP170, TRAP150, CRSP130/hSur-2/DRIP130, TIG-1,; CRSP100/TRAP100/DRIP100, DRIP97, DRIP92/TRAP95, CRSP85, CRSP77/DRIP77/TRAP80, CRSP70/DRIP70, Ring3, hSRB10/hCDK8, DRIP36/hMEDp34, CRSP34, CRSP33/hmE7, hMED6, hSRB11/hCyclin C, hSOH1, hSRB7, is a protein of the androgen receptor complex, ANPK, ARIP3, PIAS family, PIASalpha, PIASbeta, PIASgamma, ARIP4, is a transcriptional co-repressor, N-CoR family, SMRT family, NCOR2/SMRT/TRAC1/CTG26/TNRC14/SMRTE, REA, MSin3, HDAC family, HDAC5, bHLH, suUSF, AP4, E-protein, E2A/E12, E47, HEB/ME1, HEB2/ME2/MITF-2A,B,C/SEF-2/TFE/TF4/R8f, TFE family, TFE3, TFEB, Myc family, Max family, Mad families, and WBSCR14.

128. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factor is a member of the group consisting of neurogenins, Neurogenin-1/MATH4c, Neurogenin-2/MATH4a, Neurogenin-3/MATH4b, NeuroD, NeuroD-1, NeuroD-2, NeuroD-

3(6)/my051/NEX1/MATH2/Dlx-3, NeuroD-4/ATH-3/NeuroM), ATH, ATH-1/MATH1, ATH-5/MATH5, ASH, ASH-1/MASH1, ASH-2/LASH2, ASCL-3/reserved, NSCL, NSCL1/HEN1, NSCL2/HEN2, HAND, Hand1/eHAND/Thing-1, Hand2/dHAND/Thing-2, Mesencephalon-Olfactory Neuronal bHLHs, COE proteins, COE1, COE2/Olf-1/EBF-LIKE3, COE3/Olf-1, Homol/Mmot1, glia enriched bHLHs, OLIG proteins, Olig1, Olig2/protein kinase C-binding protein RACK17, Olig3, bHLH family of negative regulators, Ids, Id1, Id2, Id3, Id4, DIP1, HES, HES1, HES2, HES3, HES4, HES5, HES6, HES7, SHARP, SHARP1/DEC-2/eip1/Stra13, SHARP2/DEC-1/TR00067497_p, Hey/HRT proteins, Hey1/HRT1/HERP-2/HESR-2, Hey2/HRT2/HERP-1, HRT3, Lyl family, Lyl-1, Lyl-2, RGS family, RGS1, RGSRGS2/G0S8, RGS3/RGP3, capsulin, CENP-B, Mist1; Nhlh1, MOP3, Scleraxis, TCF15, bA305P22.3, Ip1/Pdx-1/Id1-1/Stf-1/Irf-1/Gsf, beta.-catenin, GSK3, Groucho proteins, Groucho-1, Groucho-2, Groucho-3, Groucho-3, TCF family, TCF1A, B, C, D, E, F, G/LEF-1, TCF3, and TCF4, PC4, MBF1, Delta family, Serrate family, Jagged family, Dll1, Dll3, Dll4, Jagged1, Jagged2, Serrate2, Notch family, Notch1, Notch2, Notch3, Notch4, TAN-1, Bearded family, E(spl)m.alpha., E(spl)m2, E(spl)m4, E(spl)m6, Fringe family, Mfng, Rfng, Lfng, Deltex/dx-1, MAML1, RBP-Jk/CBF1/Su(H)/KBF2, RUNX, Chordin, Noggin, Follistatin, SMAD proteins, SMAD1, SMAD2, SMAD3, SMAD4, SAMD5, SMAD6, SMAD7, SMAD8, SMAD9, SMAD10, SHH, IHH, Su(fu), GLI family, GLI/GLI1, Gli2, Gli3, Zic family, Zic/Zic1, Zic2, and Zic3.

129. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factor is a member of the group consisting of Wing helix/forkhead family of transcription factors, BF proteins, BF1, BF-2/Freac4, Fkh5/Foxb1/HFH-e5.1/Mf3, Fkh6/Freac7,

HMG transcription factors, Sox proteins, Sox1, Sox2, Sox3, Sox4, Sox6, Sox10, Sox11, Sox13, Sox14 Sox18, Sox21, Sox22, Sox30, HMGIX, HMGIC, HMGIY, HMG-17, Hox proteins, Evx family, Evx1, Evx2, Mox family, Mox1, Mox2, NKL family, NK1, NK3, Nkx3.1, NK4, Lbx family, Lbx1, Lbx2, Tlx family, Tlx1, Tlx2, Tlx3, Emx/Ems family, Emx1, Emx2, Vax family, Vax1, Vax2, Hmx family, Hmx1, Hmx2, Hmx3, NK6 family, Nkx6.1, Msx/Msh family, Msx-1, Msx-2, Cdx, Cdx1, Cdx2, Xlox family, Lox3, Gsx family, Goosecoid, GSX, GSCL, En family, En-1, En-2, HB9 family, Hb9/HLXB9, Gbx family, Gbx1, Gbx2, Dbx family, Dbx-1, Dbx-2, Dll family, Dlx-1, Dlx-2, Dlx-4, Dlx-5, Dlx-7, Iroquois family, Xiro1, Irx2, Irx3, Irx4, Irx5, Irx6, Nkx, Nkx2.1/TTF-1, Nkx2.2/TTF-2, Nkx2.8, Nkx2.9, Nkx5.1, Nkx5.2, PBC family, Pbx1a, Pbx1b, Pbx2, Pbx3, Prd family, Otx-1, Otx-2, Phox2a, Phox2B, Ptx family, Pitx2, Pitx3/Ptx3, XANF family, Hesx1/XANF-1, BarH family, BarH, Brx2, Cut, Gtx, POU domain factor proteins, Brn2/XIPou2, Brn3a, Brn3b, Brn4/POU3F4, and Brn5/Pou6F1.

130. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factors is a member of the group consisting of transcription factors with a homeodomain region plus a LIM region, Isl1, Lhx2, Lhx3, Lhx4, Lhx5, Lhx6, Lhx7, Lhx9, LMO family, LMO1, LMO2, and LMO4.

131. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factor is a member of the group consisting of Paired box transcription factors, Pax2, Pax3, Pax5, Pax6, Pax7, and Pax8, GATA family, Gata1, Gata2, Gata3, Gata4/5, Gata6, MyT family, MyT1, MyT11, MyT2, MyT3, SAL family HSal1, Sal2, Sall3, REST/NRSF/XBR, Snail

family, Scratch/Scrt, Zf289, FLJ22251, MOZ, ZFP-38/RU49, Pzf, Mtsh1/teashirt, MTG8/CBF1A-homolog, TIS11D/BRF2/ERF2, TTF-I interacting peptide 21, Znf-HX, Zhx1, KOX1/NGO-St-66, ZFP-15/ZN-15, ZnF20, ZFP200, ZNF/282, HUB1, Finb/RREB1, Nuclear Receptors, liganded, ER family, TR family, RAR familiy, RXR family, PML-RAR family, PML-RXR family, Not1/Nurr, ROR, COUP-TF family, COUP-TF1, COUP-TF2, RING finger transcription factor proteins, KIAA0708, Bfp/ZNF179, BRAP2, KIAA0675, LUN,NSPc1, Neuralized family, neu/Neur-1, Neur-2, Neur-3, Neur-4, RING1A, SSA1/RO52, ZNF173, PIAS family, PIAS-alpha, PIAS-beta, PIAS-gamma, parkin family, and ZNF127 family.

132. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factor is a member of the group consisting of proteins relating to cell-cycle progression-dedicated components that are part of the RNA polymerase II transcription complex, E2F family, E2F-1, E2F-3, E2F-4, E2F-5, DP family, DP-1, DP-2, p53 family, p53, p63, p73, mdm2; ATM, RB family, RB, p107, and p130.

133. (Withdrawn) The diagnostic device of Claim 111, wherein at least one transcription modulation factor is a member of the group consisting of factors involved in splicing.

134. (Withdrawn) The method of Claim 133, wherein at least one of the factors involved in splicing is chosen from the group consisting of Hu family, HuA, HuB, HuC, HuD, Musashi1, Nova family, Nova1, Nova2, SR proteins, B1C8, B4A11, ASF SRp20, SRp30, SRp40, SRp55,

SRp75, SRm160, SRm300, CC1.3/CC1.4, Def-3/RBM6, SIAHBP/PUF60, Sip1, C1QBP/GC1QR/HABP1/P32, Staufen, TRIP, Zfr, CPSF, and Inducible poly(A)-Binding Protein (U33818).